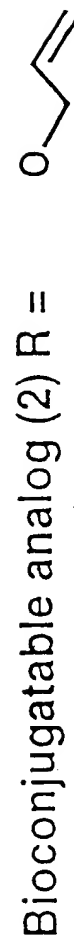
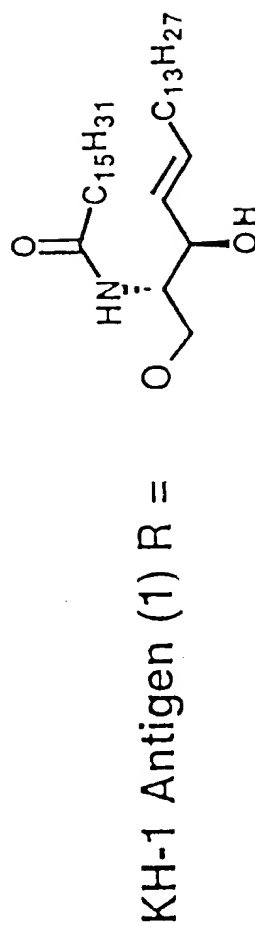
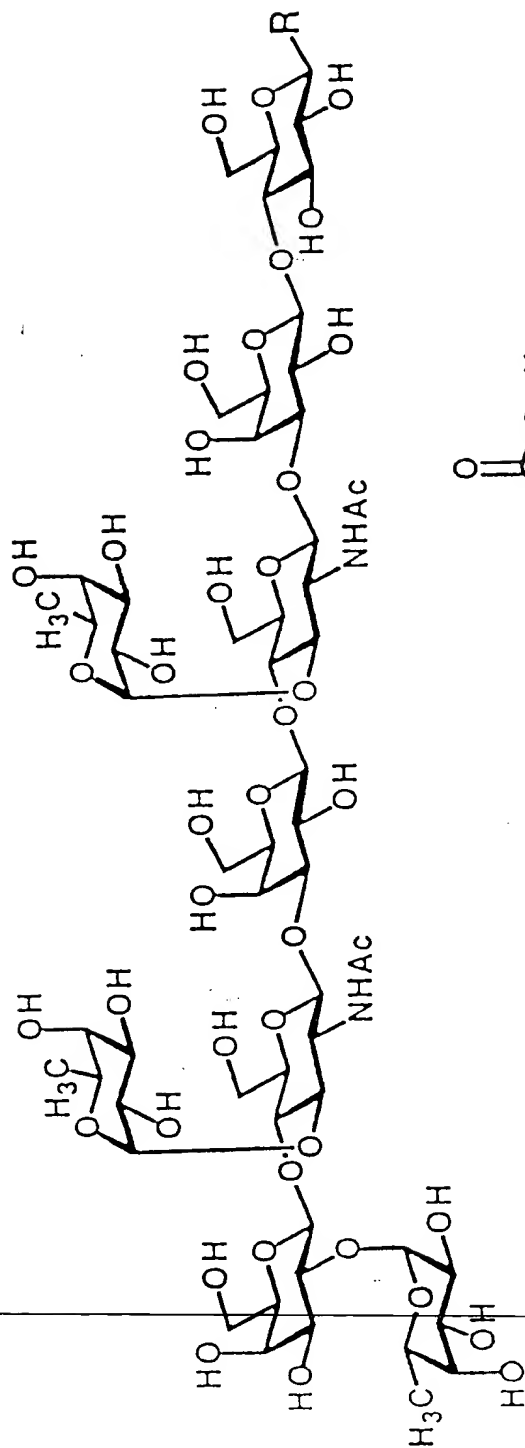


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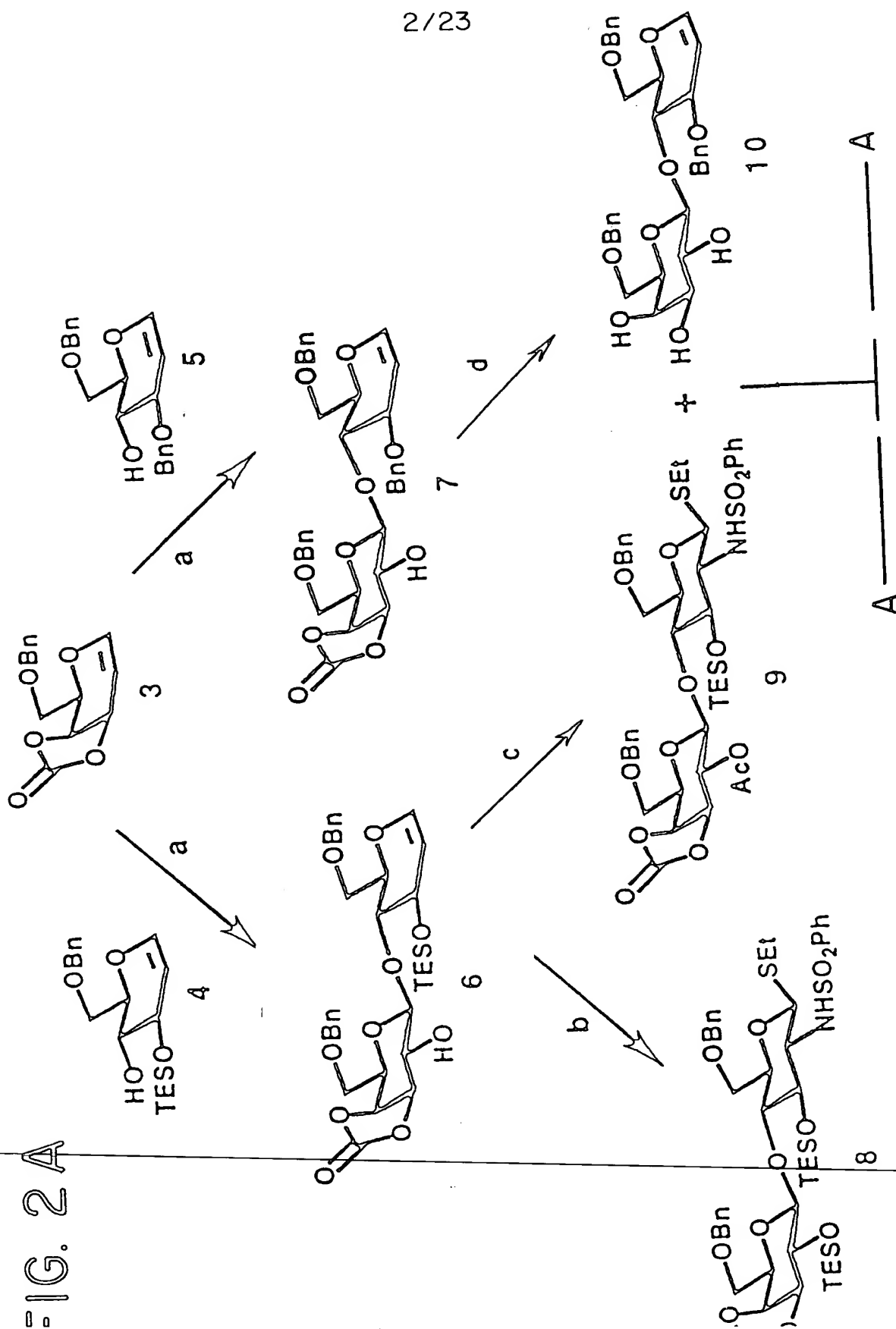


FIG. 2B

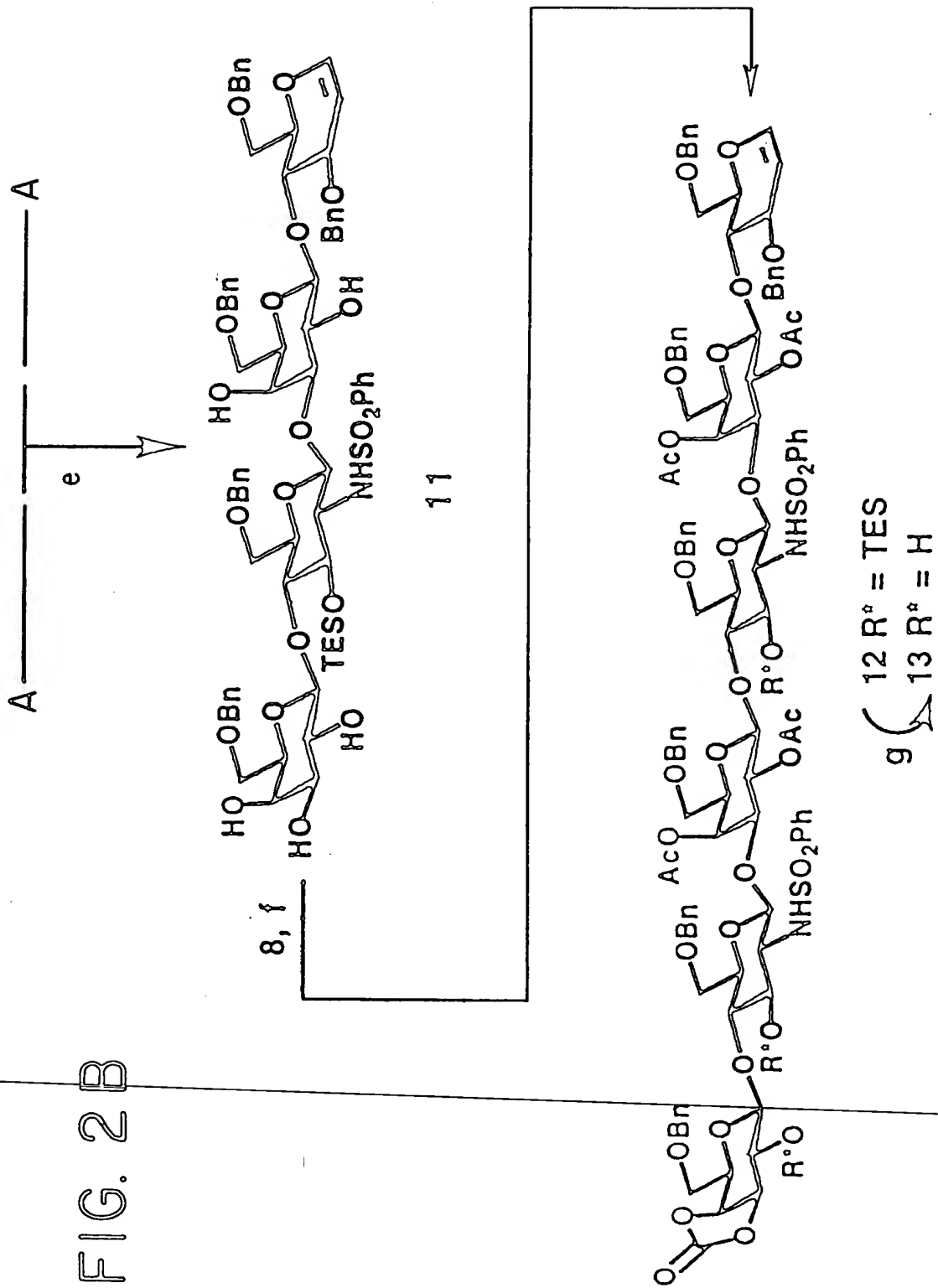


FIG. 3A

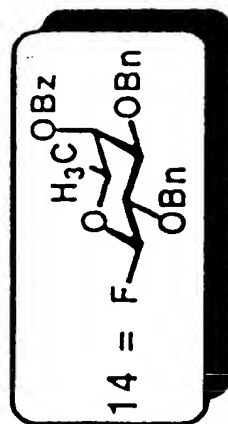
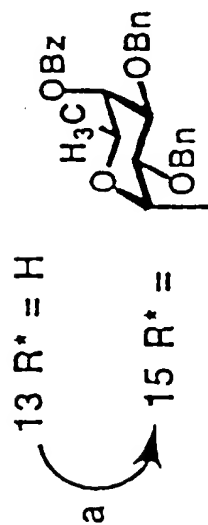
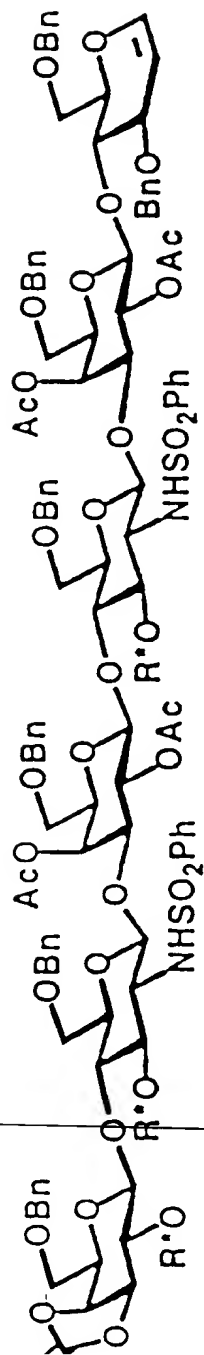
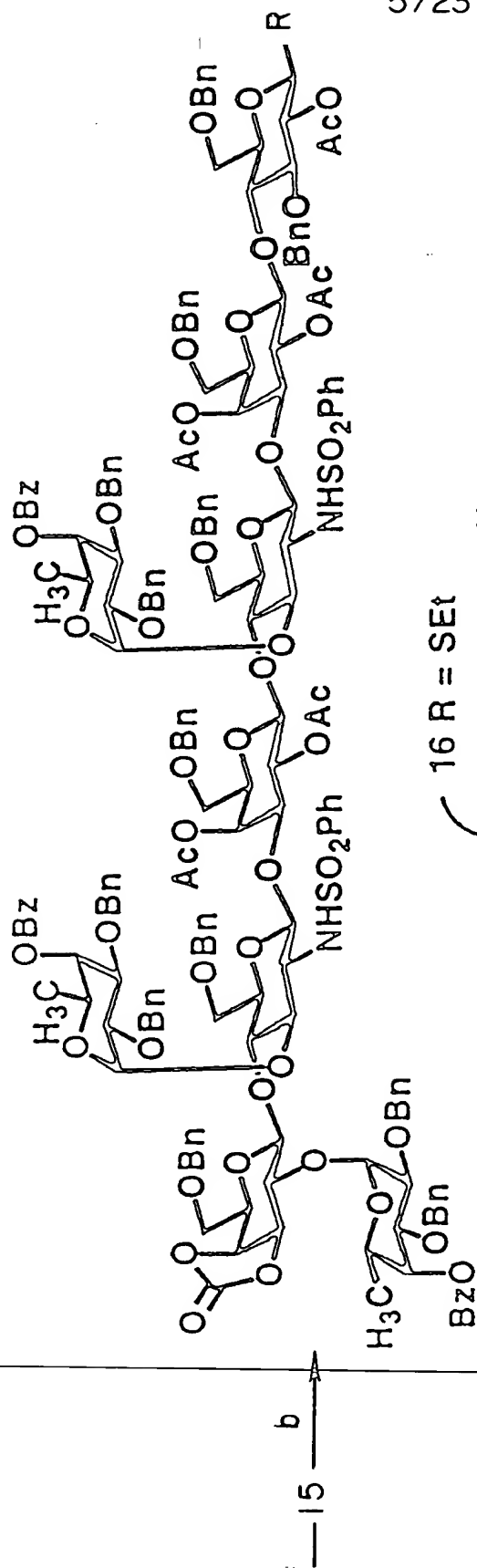
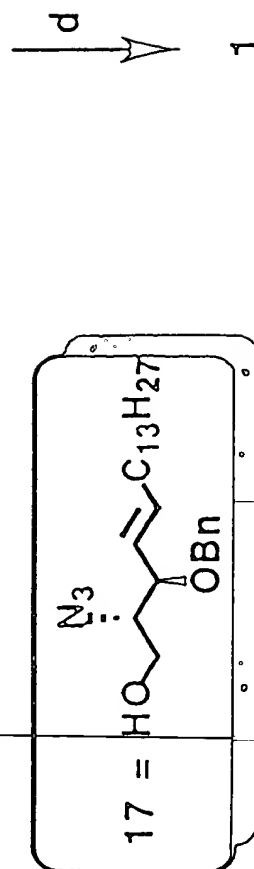
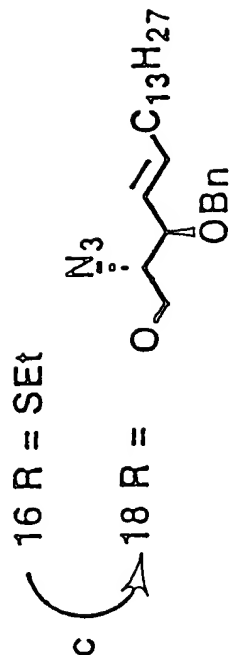


FIG. 3B

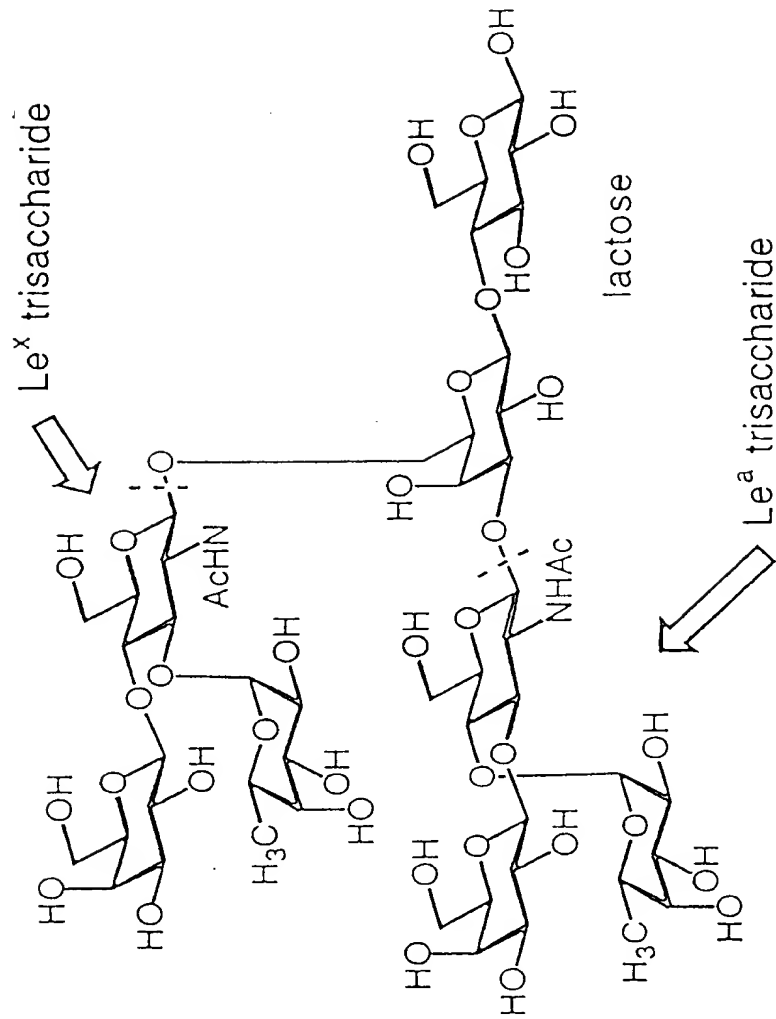


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1

FIG. 4



1) LHMDS/ BnBr
 2) 1,1'-carbonyl-diimidazole

2

1) DMDO
 2) 6, ZnCl₂
 3) Ac₂O/ Et₃N/ DMAP

3

* DMDO: dimethyldioxirane

* DMDO: dimethyldioxirane

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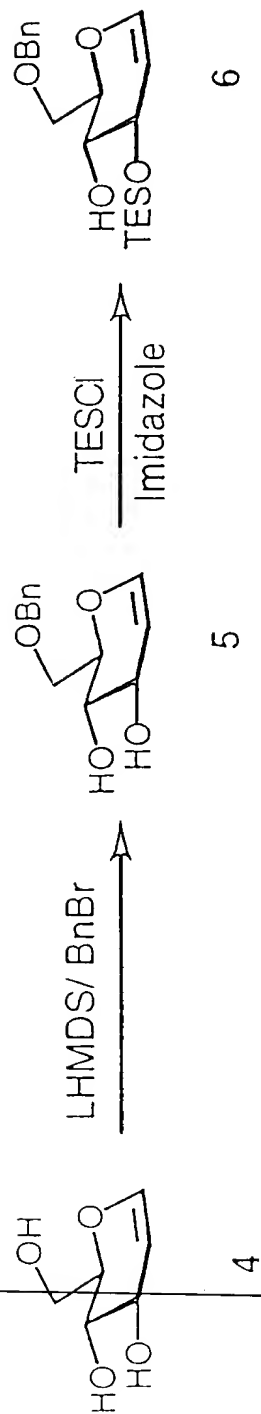


FIG. 5C

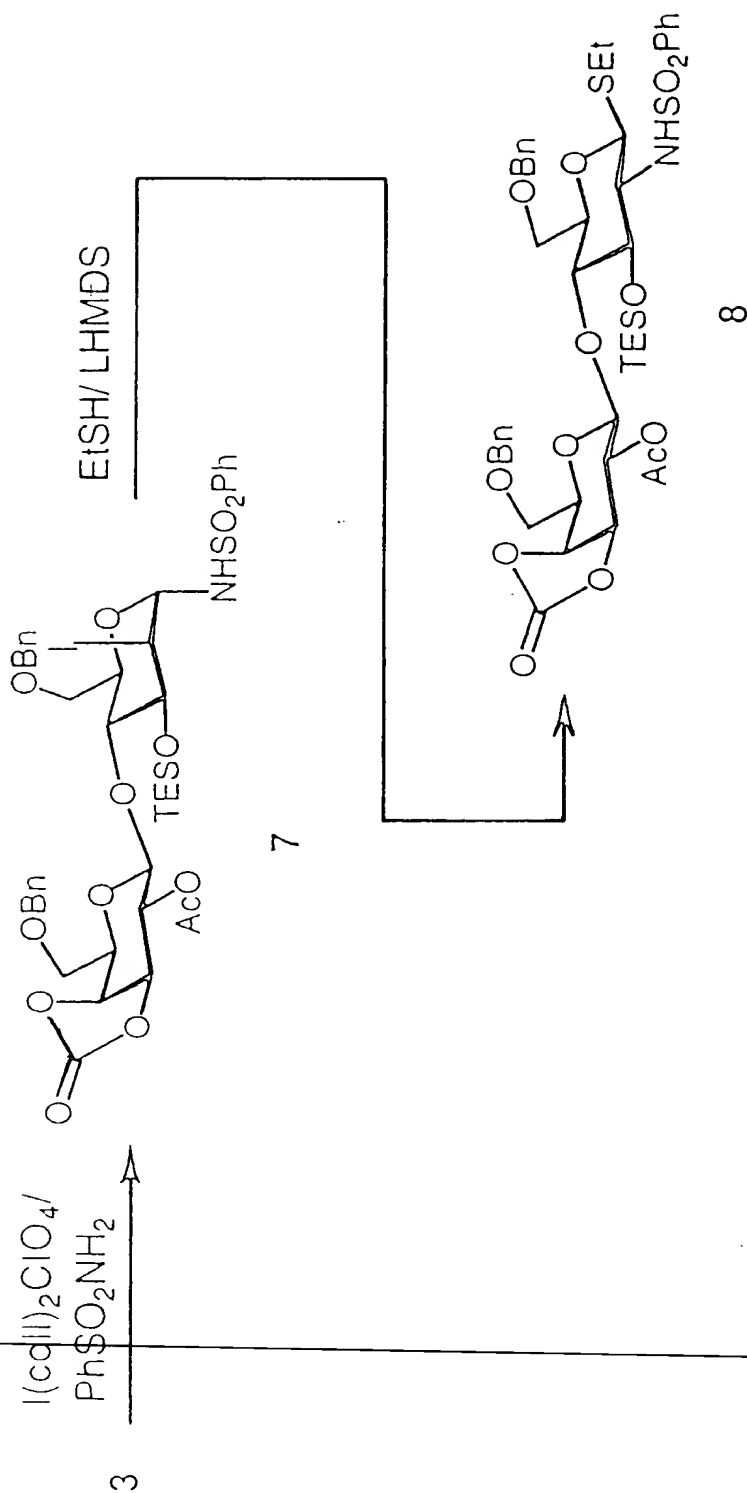
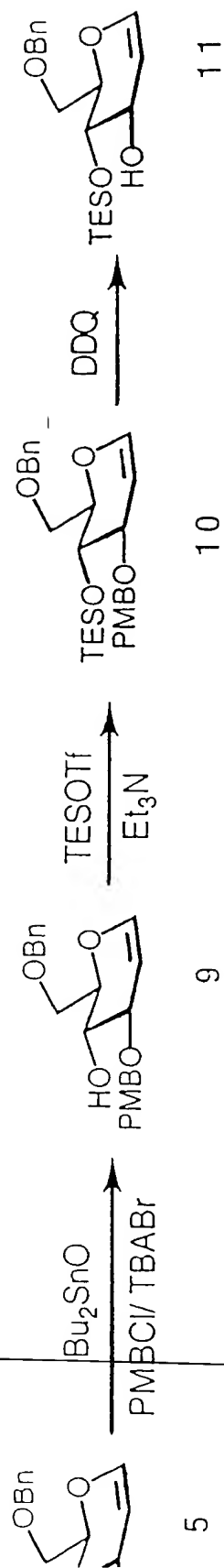
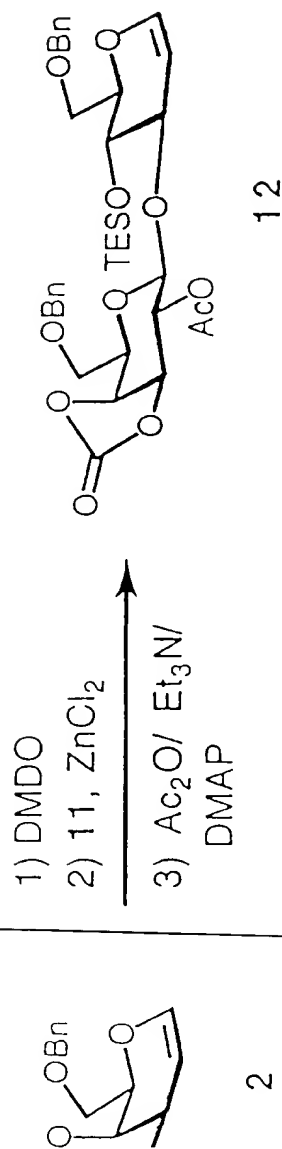


FIG. 6A



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FIG. 6B



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FIG. 6C

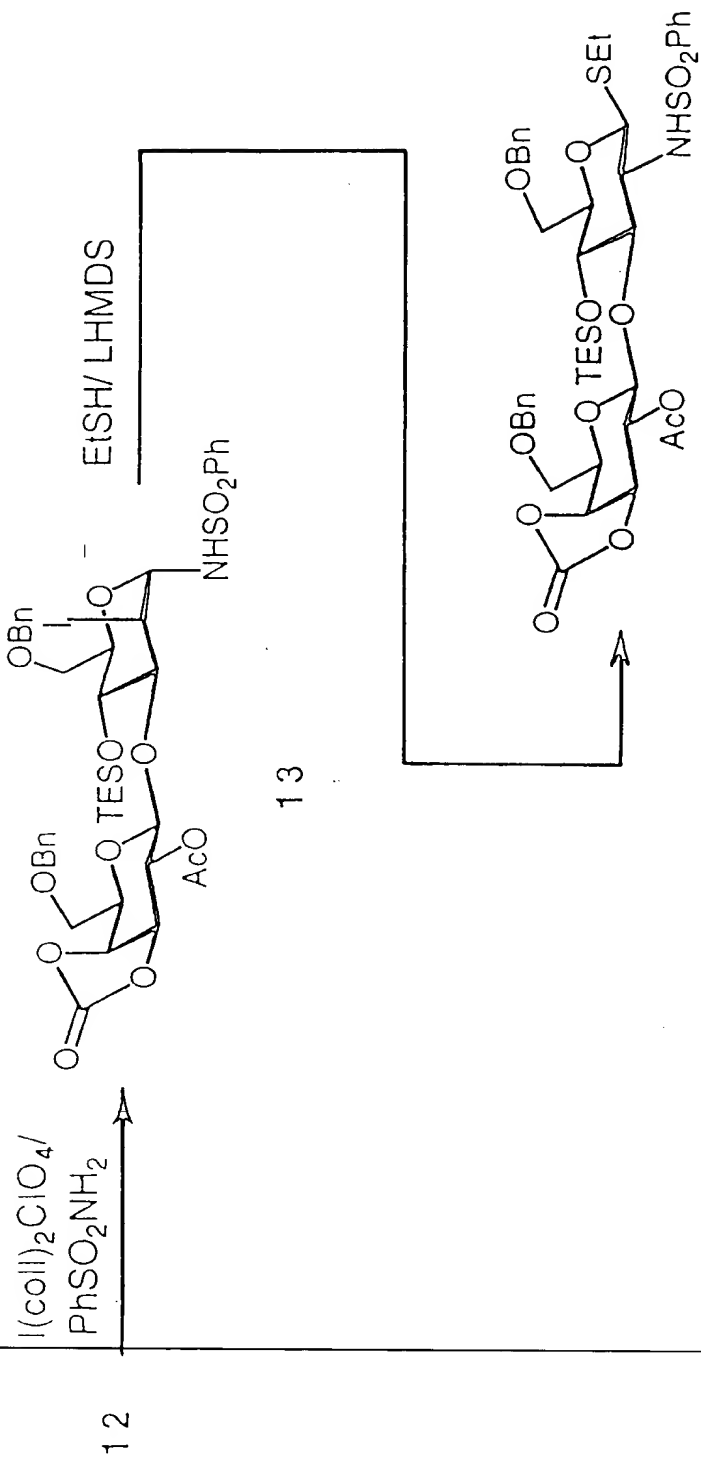
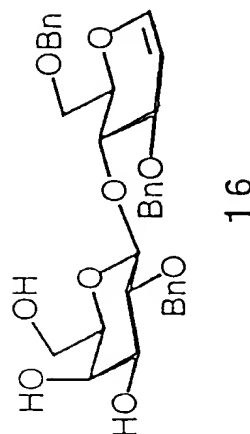
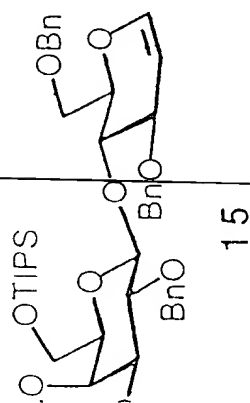


FIG. 7A

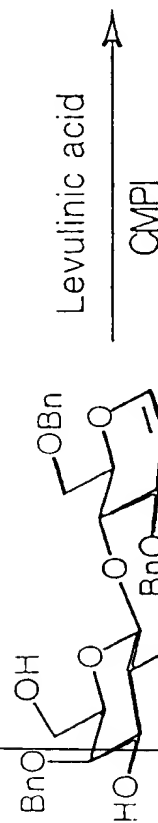
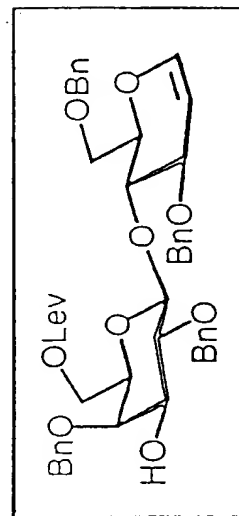
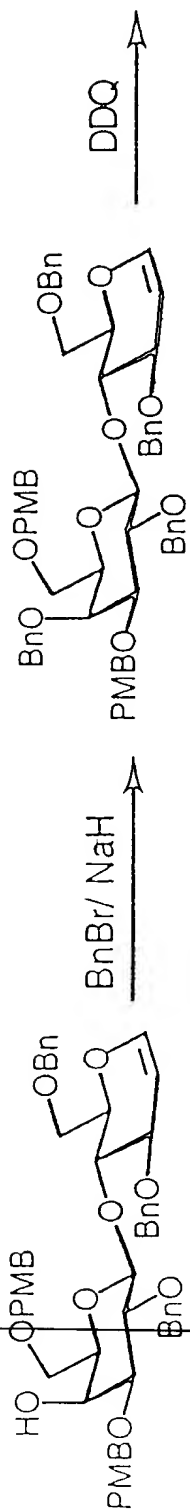


TBAF/MeONa

(Bu₃Sn)₂O/ Bu₂SnO,
then PMBCl/ TBABr

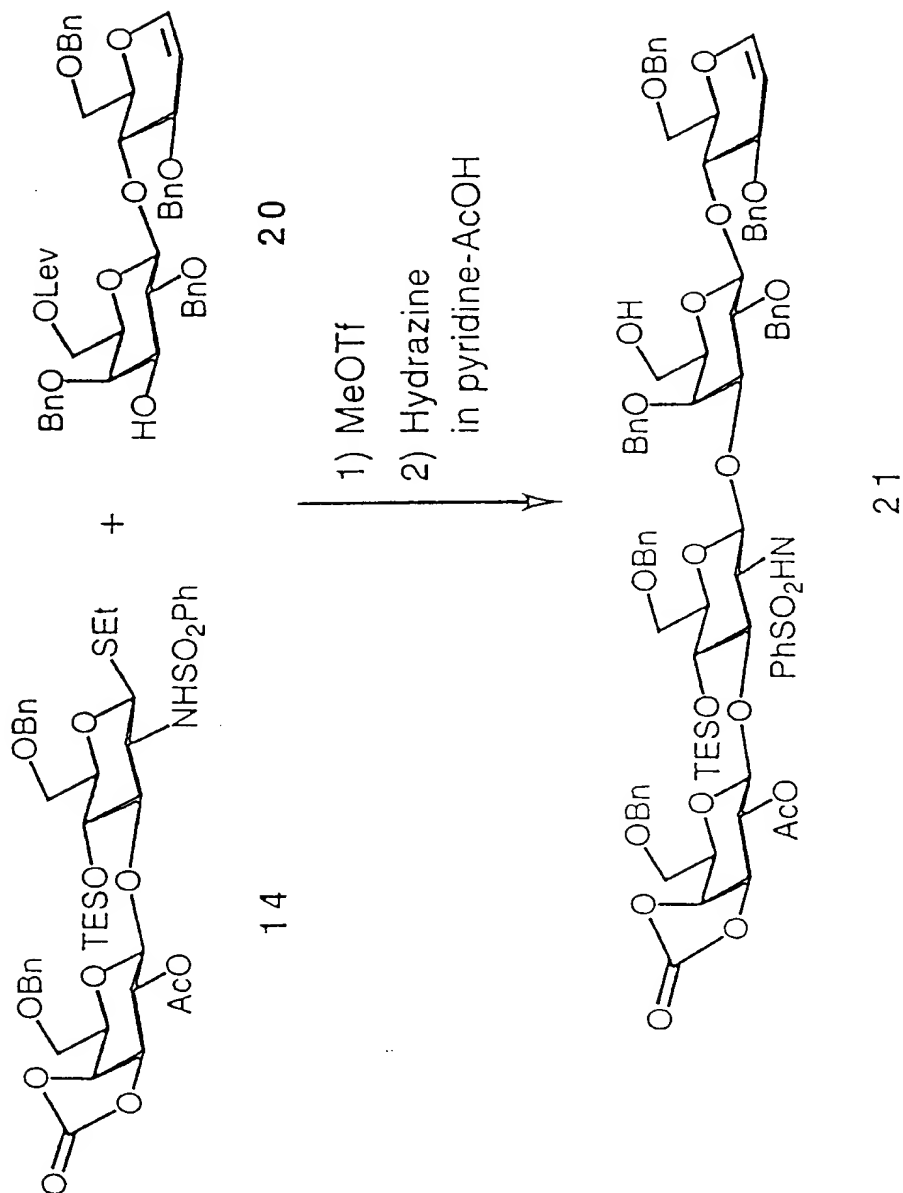
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FIG. 7B



*CMPI: 2-Chloromethylpyridinium iodide

FIG. 8



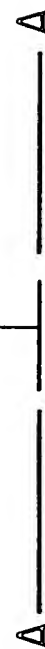
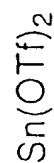
$$\begin{array}{r} 21 \\ + \\ 8 \end{array}$$


FIG. 9B

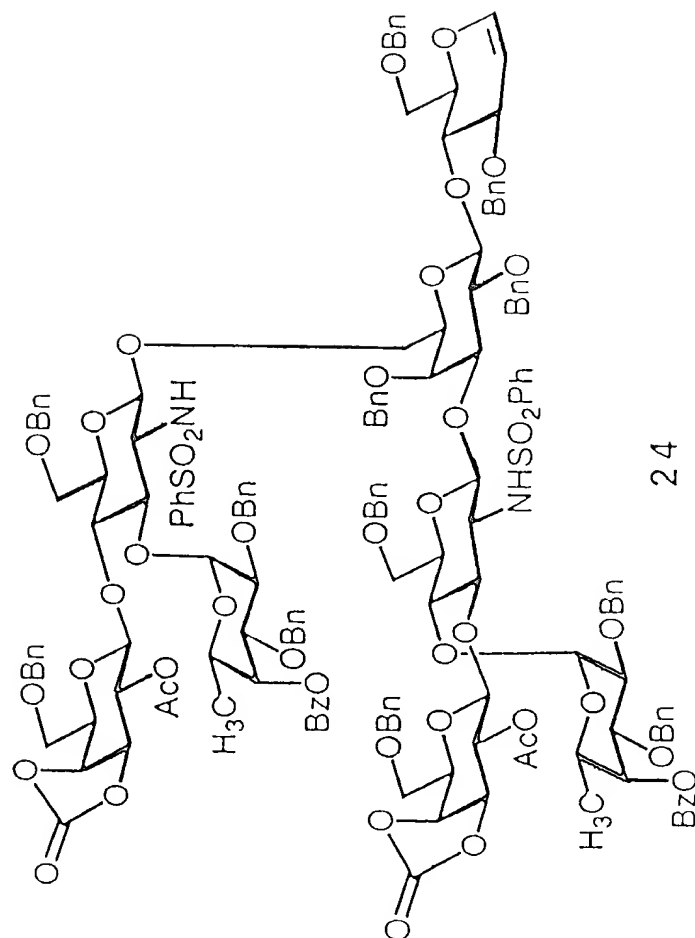
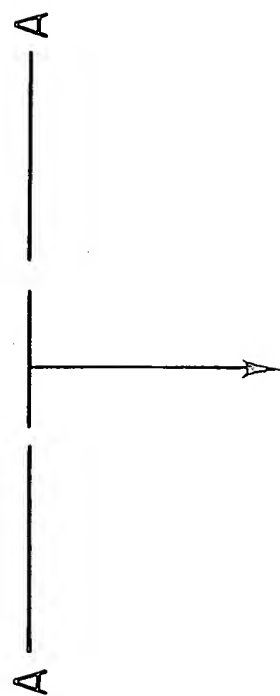
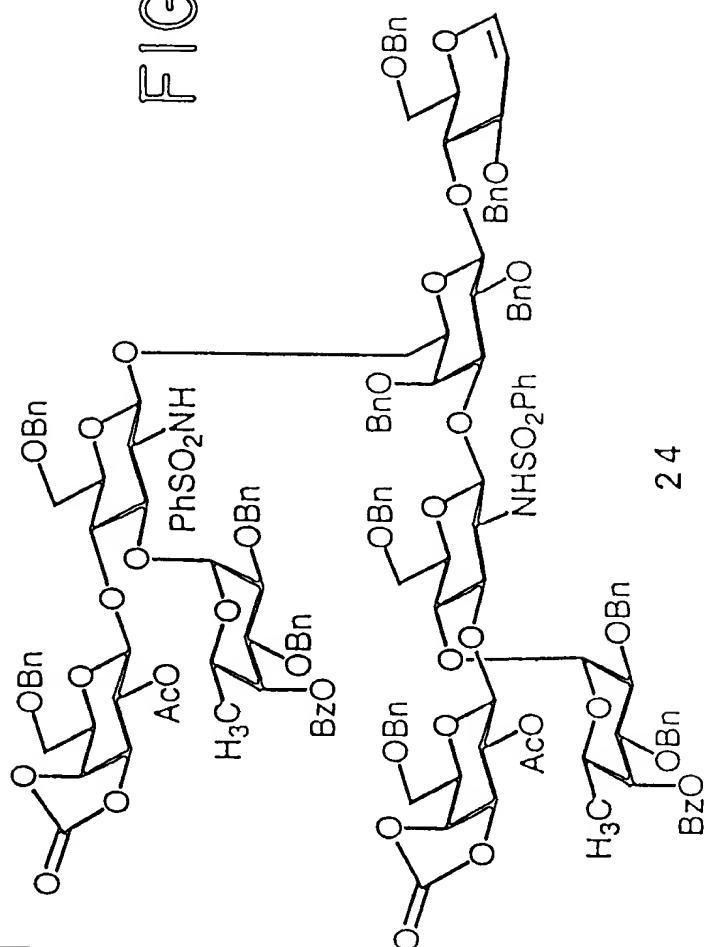


FIG. 10A

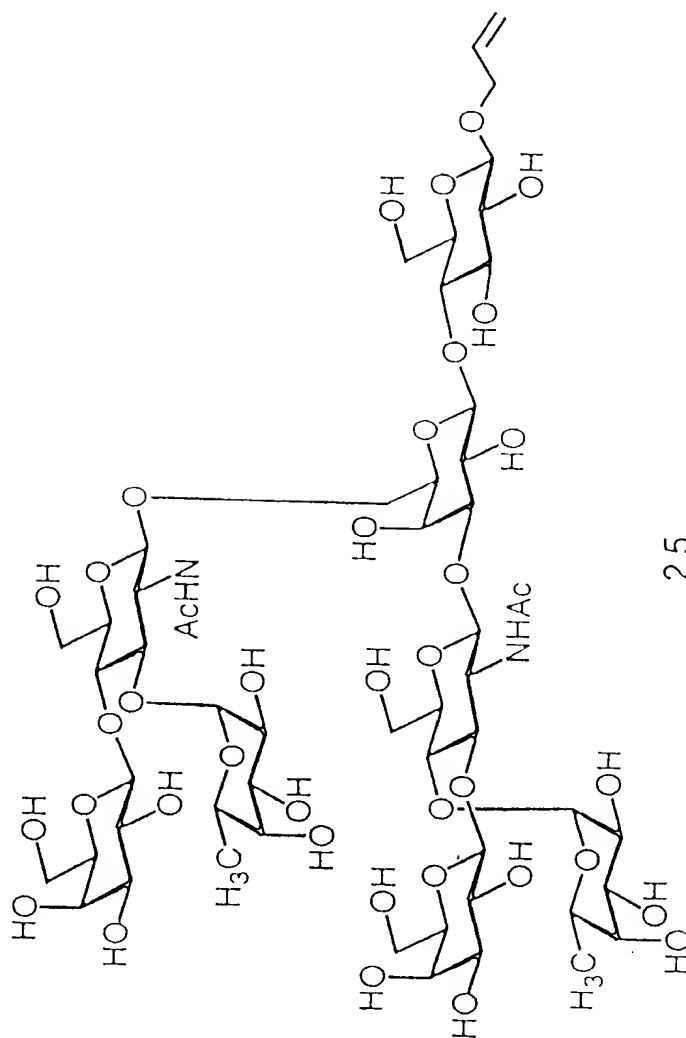
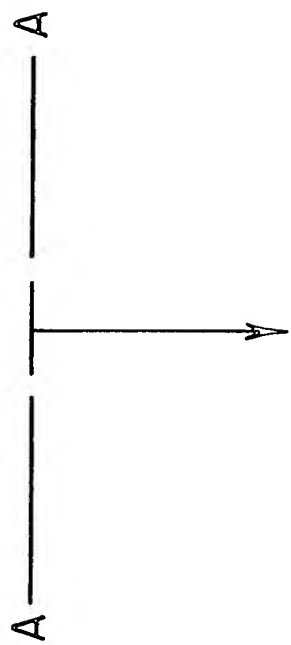


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- 1) Na/ NH₃, then
Ac₂O/ Et₃N/ DMAP
- 2) DMDO, then allyl alcohol
- 3) NaOMe

A ————— A

FIG. 10B



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FIG. 11A

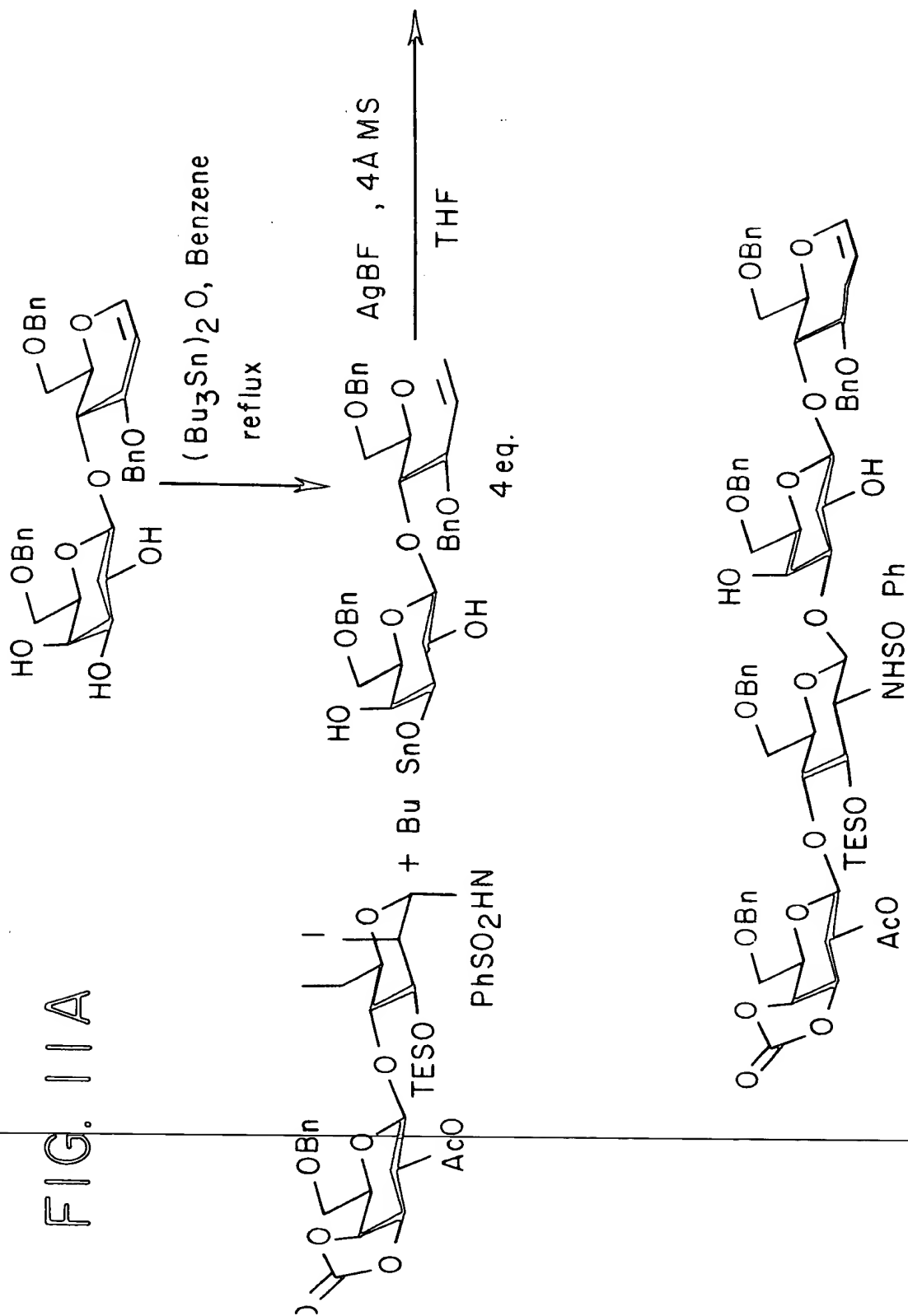
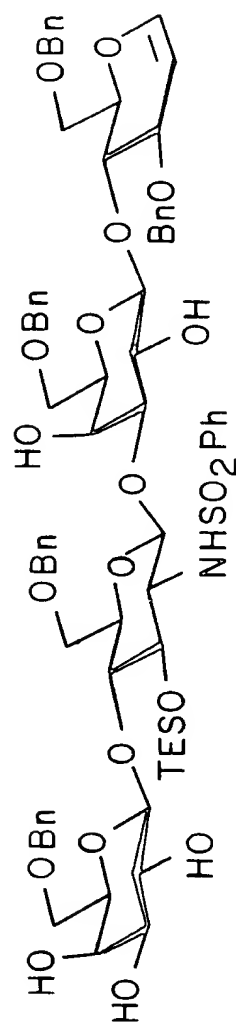
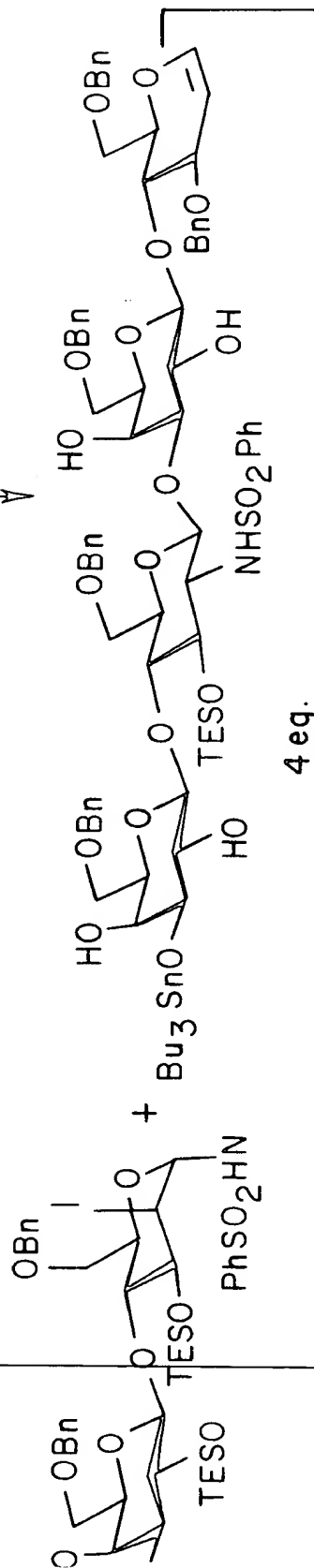


FIG. 11B



(Bu Sn) O, Benzene

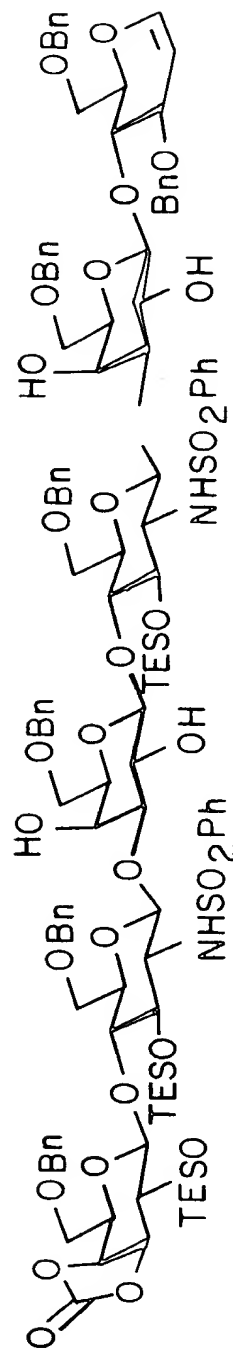
reflux



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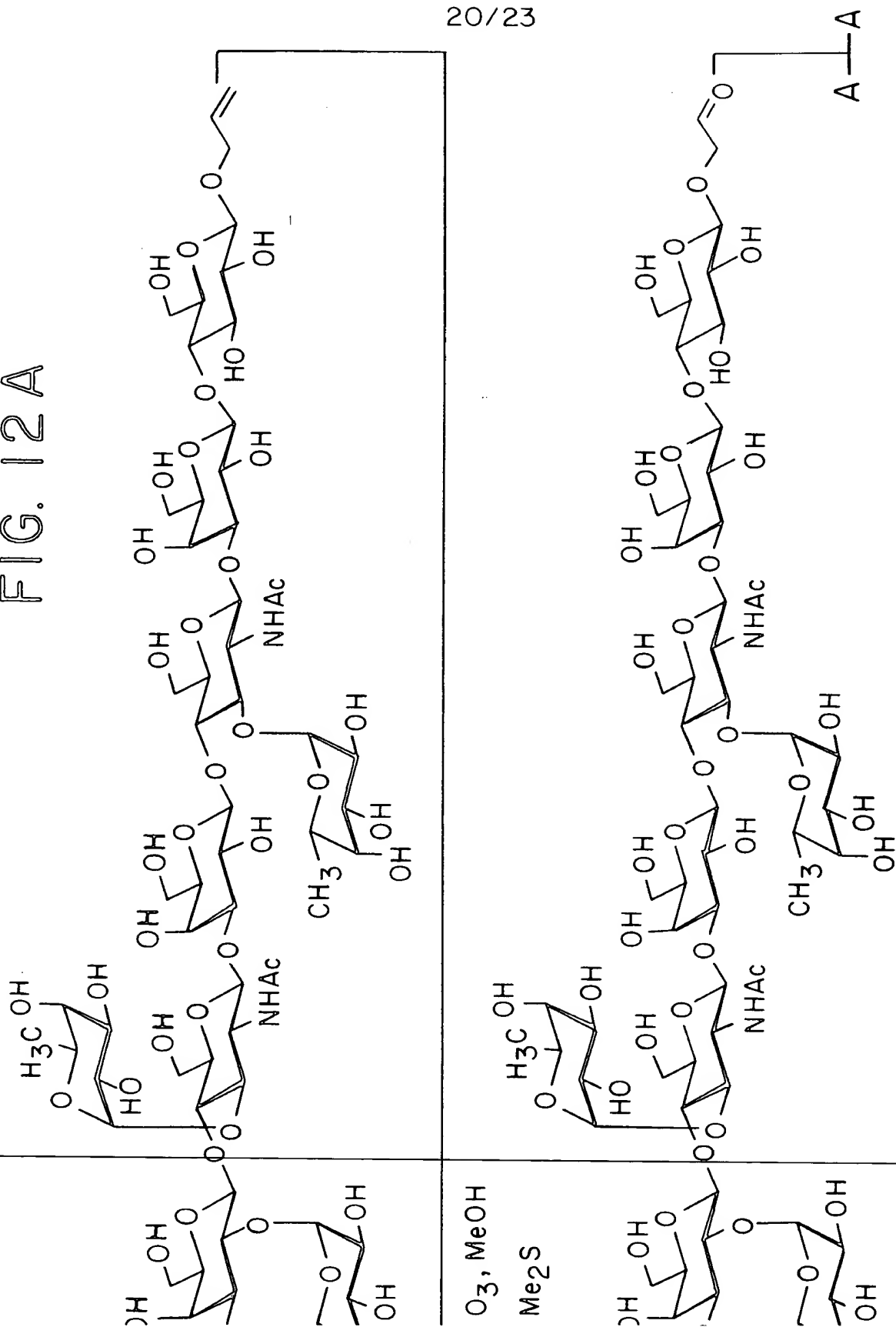
AgBF₄, 4 Å MS

THF



55%

AN-IG-LE



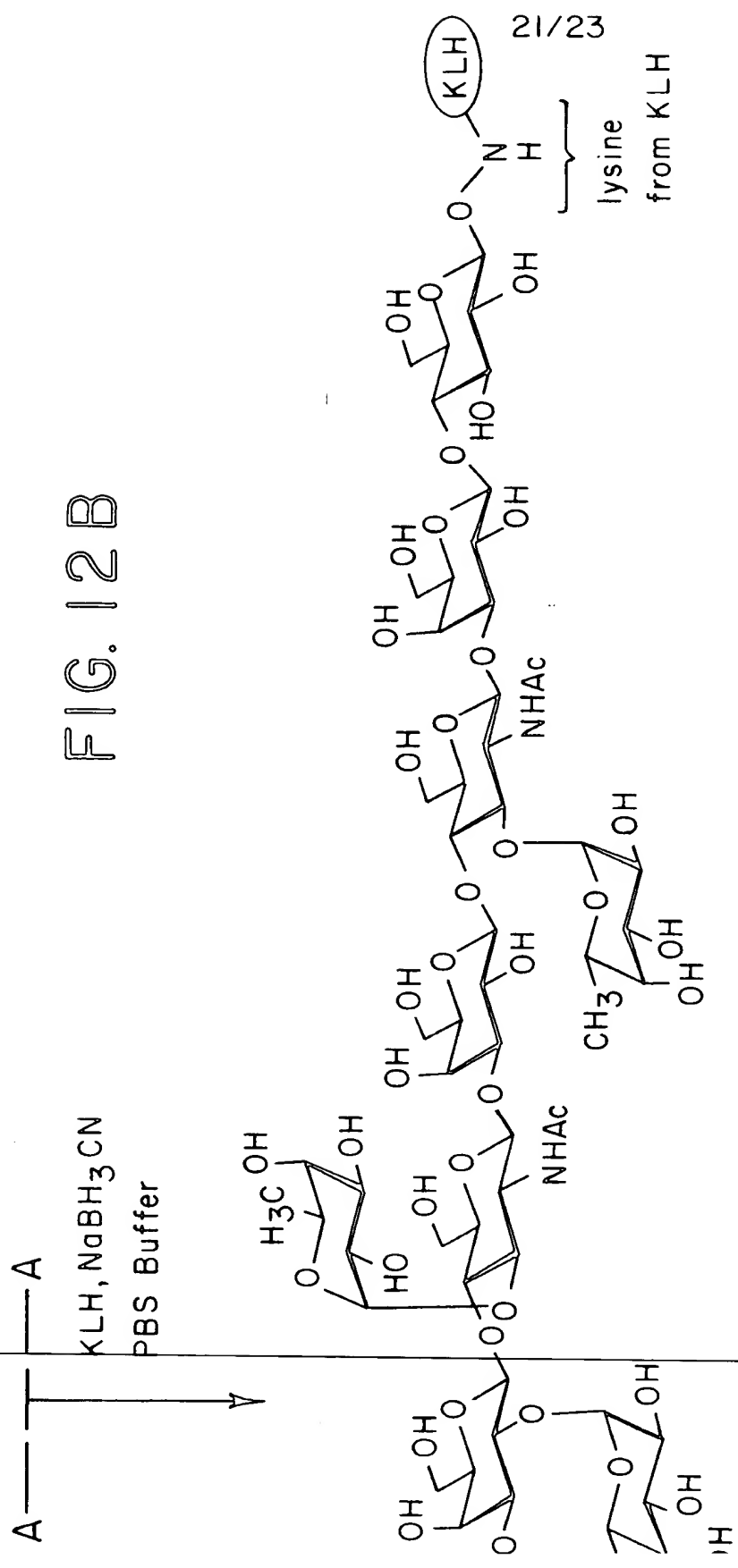


FIG. 12B

FIG. 13A

